

FRONTIERS IN GROUP DYNAMICS

II. Channels of Group Life ; Social Planning and Action Research

by KURT LEWIN

In the first of these articles, those aspects of group life which can be represented as an equilibrium in a phase space were considered. In the discussion of social equilibrium it was emphasized that for understanding social events, and for planning social action, a reference from the phase space to the total social field is usually necessary. As an example of such an analysis of a social field, certain problems of social channels will be discussed briefly in this second article. We shall then consider some general problems of social planning, with particular reference to the role of "action research" in bringing about social change.

A. SOCIAL CHANNELS

1. If one is confronted with producing widespread social changes, perhaps changing food habits of a population through some method of education, certain basic problems of procedure immediately demand attention and require decision.

Should one use radio, posters, lectures, or other means and methods for changing efficiently group ideology and group action? Should one approach the total population of men, women, and children who are to change their food habits? Or would it be sufficient and perhaps even more effective to concentrate on a strategic part of the population? In other words, do all members of the population have equal importance in determining what is eaten? If not, the more important obviously should get special attention. At first glance it would seem that the housewife plays a particular role in

determining food habits. To the extent that this proved to be correct, an efficient educational campaign should concentrate upon housewives. Similar problems come up in nearly all problems of social management. As a rule there is not enough time, personnel, and money to approach all members of the population which is to be affected. How can one find which members are the most important?

In answering this question the practitioner customarily looks for persons in "key positions." Thus if an attempt were to be made to reduce racial discrimination in a state, one might think of such key persons as certain types of community workers, industrialists, or politicians and concentrate efforts on these crucial areas in the community. I happened to encounter this problem in change experiments for the first time in regard to family food habits and

EDITORS' NOTE. When Professor Lewin wrote the article which appeared in the first issue of *HUMAN RELATIONS*, he planned to follow it with a second. Before his untimely death he was working on the manuscript of this article. Although it was far from finished and in a very preliminary form, what he had written seemed sufficiently complete to warrant publication. The present organization of the material has been made by the editors from the manuscript which Professor Lewin had prepared.

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would like to use this example for analyzing some of the factors involved.

2. Since the percentage of food that is wasted after it has once reached the family table is relatively small, one can state that changing food habits will be accomplished if one can change the character of the food that comes to the family table.

Food comes to the family table through certain "channels." One channel, and by far the most important in modern urban society, is buying at the grocery store. There may be, however, a number of such channels as, for example, growing vegetables in the garden. Within these channels food proceeds in definite steps. Figure 1 (p. 149) distinguishes in the buying channel a number of sections which correspond either to states of affairs or to significant happenings. If we consider the buying channel, the first segment of interest in this analysis is food at the grocery. It then proceeds into the segments, buying, and transportation home. Once the food is home the channel may be divided into at least two parallel arms corresponding to such alternatives as storage in the ice box or storage in the pantry. From here the food may go, with or without being cooked, to preparation for the table. Finally the food reaches the table.

By and large, changing food habits of the family is equivalent to changing the food that moves through this channel. If, therefore, we are to make a realistic analysis of the most efficient methods for bringing about changes in food habits, we have to ask what are the factors which determine the movement of food into and through the channels. To approach an answer to this question, we may ask: (a) What are the patterns of forces in the various sections; (b) What are the main

variables which determine the forces?

3. If one follows the pattern of forces which determines the movement of food from one section to another, one finds that the buying situation plays an interesting role. Food does not move by itself but is moved directly or indirectly by an individual. For our purposes, however, it is quite permissible to represent the socio-psychological forces which influence the person who directs the movement of the food by forces acting directly on the food.

The buying situation may be characterized as a conflict situation. Let us assume that food one (Figure 1) is attractive, that the force ($f_{P,EF}^1$) toward eating is large. At the same time, however, the food may be very expensive, yielding an opposite force ($f_{P,SPM}^1$) against spending money which is also large. Since the opposing forces are both large, there will be considerable conflict involved in the purchase of this food. In the figure it is assumed that food number two is both unattractive and cheap. Here, too, there will be conflict, but in this case the conflict will be small. The force toward buying food may be composed of a number of components, such as the buyer's own like of the food, her knowledge of family likes and dislikes, or her ideas about which foods are "essential." The opposing forces may arise from a lack of readiness to spend a certain amount of money, a dislike of lengthy or disagreeable forms of preparation, unattractive taste, lack of fitness for the occasion, etc. Food is bought if the total force toward buying becomes greater than the opposing forces. Food number three in the figure illustrates such a case. Food of the type of number one may be called conflict food.

In a study of food habits conducted during the war in a mid-western com-

munity, a conflict rating was prepared for various foods on the basis of interviews with housewives. It is culturally significant that the average conflict rating was considerably higher in the middle economic group than in the high or low group. This conflict seemed to result from the greater discrepancy between the standards which this group wanted to keep up and their ability to do so in a situation of rising prices. If one compares, in this study, the conflict ratings of different foods for the same group of people, one finds that meat stands highest for the low economic group, whereas it is second for the middle, and third for the high economic group. These findings seem to indicate that the conflict between "like" and "expense" in the low economic group is most outspoken for meat. The relatively high conflict rating of vegetables for the high and middle economic groups seem to be due to conflicting forces corresponding to a desire to give healthy food to the family and the fact that vegetables are less well liked, or less easily prepared.

It is of the utmost importance to note that once food has passed through the segment of the channel, "buying," some of the forces change their direction. Let us assume that the housewife has finally decided to buy the high conflict food number one. Now, the situation will be quite different for the housewife. Having invested a substantial sum of money in the food, she will be especially insistent that the food safely reach the table and be eaten. The force against spending money, instead of keeping the food from moving through the channel, will now completely reverse its direction. In other words, the force ($f_{P,WM}^1$) against wasting money will have the same direction as the force toward eating this food, or it will have the character

of a force against leaving the channel.

This example indicates that a certain area within a channel may function as a "gate"; the constellation of the forces before and after the gate region is decisively different in such a way that the passing or not passing of the unit through the whole channel depends to a high degree upon what happens in the gate region. This holds not only for food channels but also for the travelling of a news item through certain communication channels in a group, for movement of goods, and the social locomotion of individuals in many organizations. A university, for instance, might be quite strict in its admission policy and might set up strong forces against the passing of weak candidates. Once a student is admitted, however, the university frequently tries to do everything in its power to help everyone along. Many business organizations follow a similar policy. Organizations which discriminate against members of a minority group frequently use the argument that they are not ready to accept individuals whom they would be unable to promote sufficiently.

4. Gate sections are governed either by impartial rules or by "gate keepers." In the latter case an individual or group is "in power" for making the decision between "in" or "out." Understanding the functioning of the gate becomes equivalent then to understanding the factors which determine the decisions of the gate keepers and changing the social process means influencing or replacing the gate keeper.

The first diagnostic task in such cases is that of finding the actual gate keepers. In regard to food habits of the family, the answer was rather easily found. First of all, it is interesting to note that the gate keeper in the buying channel and the one in the gardening channel

was frequently different. Very often the decision concerning the type of vegetables to be planted in the garden was made by the husband, rather than the wife. Once the decision has been made to grow a certain food, the forces operating on the food to pass through the channel to the table are similar in nature to those found in the buying channel. Efforts to change the family's eating habits, therefore, need to be directed towards the husband insofar as the family eats food grown in the garden. The gate keeper in the buying channel, on the other hand, was found to be most frequently the housewife, though in a small number of families within the highest economic group, it was found that the maids do the buying and thus determine what foods will enter the buying channel.

This is an example of a sociological investigation to determine who the gate keeper is and therefore to determine whose psychology has to be studied, who has to be educated if a change is to be accomplished. We shall not attempt here to give a detailed analysis of the factors determining the forces acting on the gate keeper. It should be realized, however, that the forces in the gate segment of the channel will vary considerably, depending on who the gate keeper is, and upon the total situation within the channel. If the pantry and ice box are getting too full, for example, the forces against buying any food will be increased. The amount of food available in the buying situation also plays a role. The preferences and aversions of the other family members are also important, their ideology about eating, status considerations, difficulties in preparing meals, etc.

It should be realized, however, that "supply and demand" in case of family buying as well as in larger economic settings does not directly

affect the constellation at the gate. What counts is the effect which the situation in the various sections of the channel has on the gate keeper. (This is one of the reasons why a combination of economics with other social sciences is necessary for predicting actual group conduct.) Similarly, the effect of husband and children and any change of their desires will affect what comes on the table only to the degree that it affects the housewife.

Similar considerations hold for any social constellation which has the character of a channel, a gate and gate keepers. Discrimination against minorities will not be changed as long as forces are not changed which determine the decisions of the gate keepers. Their decisions depend partly on their ideology, that is their system of values and beliefs which determine what they consider to be "good" or "bad," and partly on the way they perceive the particular situation. Thus if we think of trying to reduce discrimination within a factory, a school system, or any other *organized institution*, we should consider the social life there as something which flows through certain channels. We then see that there are executives or boards who decide who is taken into the organization or who is kept out of it, who is promoted, and so on. The technique of discrimination in these organizations is closely linked with those mechanics which make the life of the members of an organization flow in definite channels. Thus discrimination is basically linked with problems of management, with the actions of gate keepers who determine what is done and what is not done.

5. The relation between social channels, social perception, and decision is methodologically and practically of considerable significance. The theory of channels and gate keepers helps to

define more precisely how certain "objective" sociological problems of locomotion of goods and persons intersect with "subjective" psychological and cultural problems. It points to sociologically characterized places, like gates in social channels, where attitudes count most for certain social processes and where individual or group decisions have a particularly great social affect.

The particularly impressive changes in food habits which were attained by

means of group decision emphasizes the relation of channels to the position of the group and to social diagnosis. This relation is twofold: (a) Group decisions depend partly on how the group views the situation, and it therefore can be influenced by a change in this perception; (b) Group perception of the result of social action is essential to decision about the next step. This latter point we should like to consider somewhat more closely by discussing certain problems of planning.

B. FEEDBACK PROBLEMS OF SOCIAL DIAGNOSIS AND ACTION

1. Many channels of social life have not simply a beginning and an end but are circular in character. The large section of the channel which leads food from the grocery store into the mouths of the family members or into the garbage can is actually a part of another circular process. This process includes dishwashing, receiving money from the husband, and other sections of housekeeping which follow each other in a circular way. Many of the sections are interdependent in that finishing one starts the next.

Organized social life is full of such circular channels. Some of these circular processes correspond to what the physical engineer calls feedback systems, that is, systems which show some kind of self-regulation. One of these systems will be discussed here as an example of problems of social steering or self evaluation.

2. Planned social action usually emerges from a more or less vague "idea." An objective appears in the cloudy form of a dream or a wish, which hardly can be called a goal. To become real, to be able to steer action, something has to be developed which might be called a "plan." The transi-

tion from an idea to a plan presupposes that: (i) The objective has to be clarified; (ii) The path to the goal and the available means have to be determined; (iii) A strategy of action has to be developed. These three items together make up the "general plan" which is to precede action.

It should be noted that the development of a general plan presupposes "fact-finding." The original state of the idea of the goal corresponds to an area in the social field or the life space of the individual that is but little structured in itself (Figure 2 p. 149) and the relation of which to the rest of the field is not clearly determined. Fact-finding is necessary to structure the goal, its relation to the total setting and the path and means which may lead to the goal. On the basis of this fact-finding the goal is usually somewhat altered in light of the findings concerning the means available.

The emerging "general plan" corresponds to a field (lower diagram in Figure 2) which contains the structure of the goal, and the steps to the goal in sufficient detail to serve as a blueprint for action. It is important, however, that such a plan be not too much

frozen. To be effective, plans should be "flexible." The flexibility of plans requires the following pattern of procedure: Accepting a plan does not mean that all further steps are fixed by a final decision; only in regard to the first step should the decision be final. After the first action is carried out, the second step should not follow automatically. Instead it should be investigated whether the effect of the first action was actually what was expected.

In military terms, reconnaissance should provide data about where one now stands and whether the field has changed significantly. The result of the reconnaissance after the first step of action should be twofold: (i) It might be necessary to alter the "general plan"; (ii) The basis is given for a final decision on the second step. After the second step again reconnaissance follows, leading again to an alteration of the general plan and the decision on the next step Figure 3 (p. 149).

This pattern of planned group action is probably developed in most detail in the army. It is widespread, however, in many areas of social life, frequently though in a rather rudimentary form. To understand what kind of social organization is required for efficient planned group action one can refer to the pattern of certain goal seeking machines.

3. During the war a multitude of self-steering missiles were developed, goal seeking machines which can reach their target with a remarkable degree of precision. Basically, these goal seeking machines have two components: one is equivalent to a sense organ, perhaps a radar eye; the other is an action organ, for instance, a gun which shoots bullets. If the beam from the target hits the eye of center, a mechanism is set into motion which automati-

cally turns the eye to the center and changes the direction of the action organ toward the target. In other words, the eye functions as a steering mechanism. Technically this is achieved by so-called "feedback" processes which link three entities, namely: (i) the position of the target, (ii) the sense organ, (iii) the action organ. The action organ is continuously steered toward the goal with the help of the sense organ which "seeks" to eliminate divergencies between action and goal.

Some actions of human beings such as driving a car or reaching for a glass of water are steered by a functionally equivalent process. The individual watches the discrepancy between the direction of his action and the direction toward the goal, and this perceived discrepancy more or less automatically steers his action.

Is there anything equivalent in social life to steer social action? What are our social sense organs? How about the steering process?

The engineer knows of steering processes which have no reference to the outside. An example is the system which assures that the rudder of a ship follows every turn of the steering wheel at the captain's bridge. This system lies entirely within the ship and has no relation to points outside. In administration such steering corresponds to a case where a superintendent reports back to the manager of the factory that he has carried out the required action of hiring an expert. That, of course, does not assure that the action has the desired effect of improving the course of the organization. Of similar nature is the following example: Citizens who feel that certain group relations do not follow an appropriate course get together and try to give the wheel a turn toward the

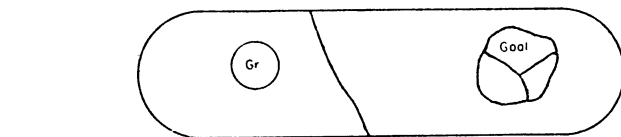
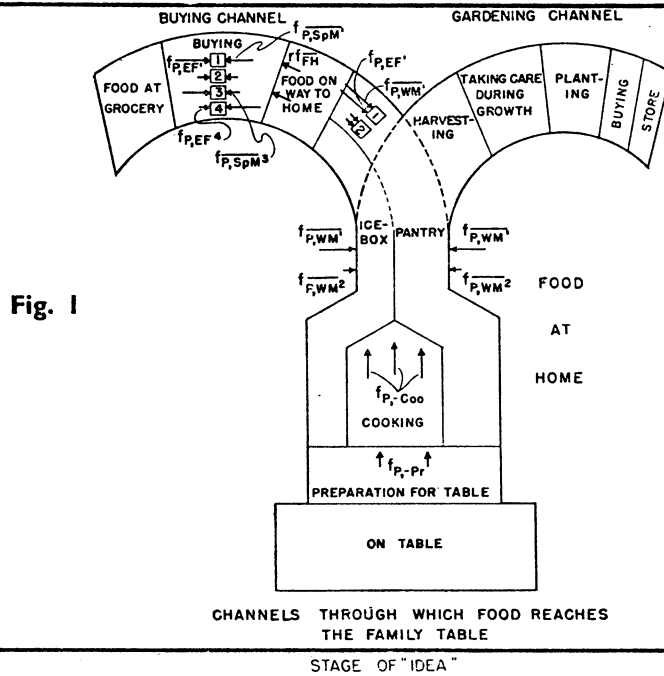
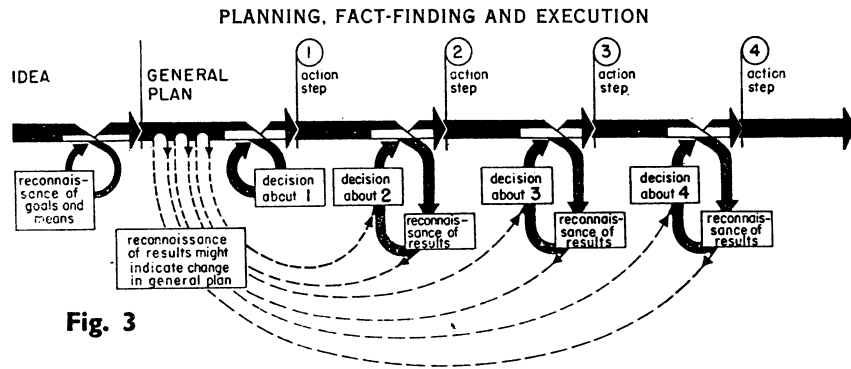
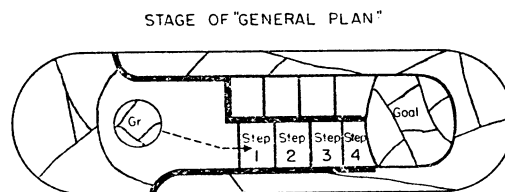


Fig. 2



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right direction by arranging a brotherhood day. They are elated for having done a good job if the meeting was impressive. Perhaps, however, they should be compared with the captain who hears that his course is too much to the left, rushes to the wheel, turns it to the right and, having done so, goes happily to dinner. In the meantime, his boat goes around in circles.

A good number of our social or administrative actions are of a similar nature. The effort might lead to the satisfaction of the action but actually it does not reach the objective. The reason for the shortcoming, expressed in terms of feedback systems, is that all the inter-dependent parts of the process lie within the moving boat. What is missing is a link which steers the action by its effect on the outside rather than by the effect within the organization.

In many fields of social management as, for instance, in those dealing with minority problems, education, conducting conferences, or committees, we lack signposts of exactly where we are and in what direction we are moving with what velocity. As a result, the actors are uncertain of themselves, they are at the mercy of likes or dislikes of bosses, colleagues, or the public. Perhaps even more important, however, they are unable to "learn." In a field that lacks objective standards of achievement, no learning can take place. If we cannot judge whether an action has led forward or backward, if we have no criteria for evaluating the relation between effort and achievement, there is nothing to prevent us from making the wrong conclusions and to encourage the wrong work habits. Realistic fact-finding and evaluation is a prerequisite for any learning. No wonder that a recent survey of workers in group relations revealed that one of their great difficul-

ties is their feeling of unclearness about what they should do.

An efficient steering of social action presupposes that fact-finding methods have to be developed which permit a sufficiently realistic determination of the nature and position of the social goal and of the direction and the amount of locomotion resulting from a given action. To be effective, this fact-finding has to be linked with the action organization itself: it has to be part of a feedback system which links a reconnaissance branch of the organization with the branches which do the action. The feedback has to be done so that a discrepancy between the desired and the actual direction leads "automatically" to a correction of actions or to a change of planning.

Accounting systems in business are designed to function as reconnaissance parts in the feedback system of a social group. The effectiveness of these and other methods of fact-finding depend upon the frequency with which the reconnaissance is carried out, whether it reaches the really essential data, whether the reconnaissance is transmitted to a sufficiently powerful level in the hierarchy of steering, without channeling so many fact-findings into that steering group that it is overburdened.

4. The research needed for social practice can best be characterized as research for social management or social engineering. It is a type of action-research, a comparative research on the conditions and effects of various forms of social action, and research leading to social action. Research that produces nothing but books will not suffice.

This by no means implies that the research needed is in any respect less scientific or "lower" than what would be required for pure science in the field

of social events. I am inclined to hold the opposite to be true. Institutions interested in engineering, such as the Massachusetts Institute of Technology, have turned more and more to what is called basic research. In regard to social engineering, too, progress will depend largely on the rate with which basic research in social sciences can develop deeper insight into the laws which govern social life. This "basic social research" will have to include mathematical and conceptual problems of theoretical analysis. It will have to include the whole range of descriptive fact-finding in regard to small and large social bodies. Above all, it will have to include laboratory and field experiments in social change.

Field experiments are basically not different from laboratory experiments. An experiment as opposed to a mere descriptive analysis tries to study the effect of conditions by some way of measuring or bringing about certain changes under sufficiently controlled conditions. The objective is to understand the laws which govern the nature of the phenomena under study, in our case the nature of group life.

A change (ch) refers to the difference between a preceding situation (S) and a following situation which has emerged out of the first as a result of some inner or outer influences. ($Ch = S_{\text{after}} - S_{\text{before}}$). A law is found if this change, ch, can be linked to a function, f, of certain factors x and y which are found to be responsible for that change. Not all laws have this form. However, this form represents one of the simplest patterns of a law and characterizes also a certain type of experimental procedure and analysis.

This type of experiment, whether laboratory or field experiment, has as its objective the study of three situations or processes, namely: (a) the character

of the beginning situation, (b) some happenings designed to bring about certain change, (c) a study of the end situation to see the actual effect of the happening on the beginning situation. A diagnosis of the before and after situation permits us to define the change or effect; studying the happening should be designed to characterize the factors which brought about this change.

It is obvious that the quality and exactness of the conclusions that might be drawn cannot be larger than the degree to which all three parts of the process can be analyzed. It demands a measurement of the situation before and after but equally a careful description and analysis of those happenings which brought about the change.

In case of a field experiment such as a workshop, this means that an analysis of the situation before and after the workshop is needed to define the change created by the workshop. It means also that the workshop itself would have to be described as carefully and accurately as possible with the objective of finding out as much as possible exactly what type of happening had created this change.

Here, I feel, research faces its most difficult task. To record the content of the lecture or the program would by no means suffice. Description of the form of leadership has to take into account the amount of initiative shown by individuals and subgroups, the division of the trainees into subgroups, the frictions within and between these subgroups, the crises and their outcome, and, above all, the total management pattern as it changes from day to day. These large-scale aspects, more than anything else, seem to determine what a program of action will accomplish. The task which social scientists have to face in objectively recording these data is not too different from that of

the historian. We will have to learn to handle these relatively large units of periods and social bodies without lowering the standards of validity and reliability to which we are accustomed in the psychological recording of the more microscopic units of action and periods of minutes or seconds of activity.

One of the difficulties which a description of happenings as extended as the workshop presents to the psychologist is the mere size. Historians have been accustomed to dealing with units of decades and hundreds of years. Psychologists have been more accustomed to minutes and seconds. The particular meaning which the term analysis had to the scientist in the nineteenth century and in the beginning of the twentieth, has identified scientific procedure to many psychologists with procedures which deal with minute time periods. It is only recently that some of us have lost the prejudice according to which the description of a large unit is less scientific than the description of a small unit.

Even those among us who in principle do not like to discriminate against large units have to face a task which is new and a bit frightening even to the brave soul. It raises the question: can we hope to use as objective a description and measurement of large social units as we have been able, at least to the degree we have learned to characterize and measure small units? Is there any way to keep up our standards of reliability and objectivity? At present I feel the social scientist is threatened by the Scylla of losing his "objectivity" by the attempt to deal with sufficiently large and meaningful units on the one hand, and by the Charybdis of losing the "validity" of his study by dealing with inadequate and frequently too small units.

5. Any research program set up within the framework of an organization desiring significant social action must be guided closely by the needs of that organization, and must help define those needs more specifically. Usually there will be three kinds of problems to which the research staff must apply themselves:

Immediate problems. There will be a number of problems requiring some immediate program of action. Experience has shown that the research social scientist can make two contributions here: (a) As consultants on methods of action. The accumulation of scientific findings concerning social action techniques is mounting daily and only a technician in this field can be expected to keep up with them. (b) As evaluation experts. Major actions should not be launched without proper provisions being made for the evaluation of the success of the action and for the discovery of more effective modifications which may be found. Adequate evaluation is a technical research problem.

Pre-testing. Pre-testing by experimental trying-out of certain potential lines of action with properly selected groups and adequately defined controls is one of the most practical refinements of science, and one of the surest guides to sound administrative policy.

Long-term policies and action programs. As research proceeds, it will become more and more valuable for determining long term policies and action programs. By delegating to the research worker certain responsibilities and freedoms to carry on what is sometimes called "pure research" in a general area of dynamics it is safe to assume that certain basic data for long term planning will gradually emerge. While research of this type sometimes does not look immediately

“practical,” those in the past who have backed this line of activity have reaped a rich harvest of efficiency, economy and effectiveness.

6. Obviously social management in the various areas of modern society have to face a tremendous task. Its solution presupposes social fact-finding of an unheard of magnitude. It requires basic research about social steering systems. The fear of fascism seems to have driven some people into the greatest kind of misunderstanding which identifies democracy with planlessness. The survival and development of democracy depends not so much on the development of democratic ideals which are wide-spread and strong. Today, more than ever before, democracy depends upon the development of efficient forms of democratic social management and upon the spreading of the skill in such management to the common man.

The social scientists, perhaps more than the natural scientists, have to learn to be unafraid and at the same time fair-minded. To my mind, fair-mindedness is the essence of scientific objectivity. The scientist has to learn to look facts straight in the face, even if they do not agree with his prejudices. He must learn this without giving up his belief in values, that is, without

regressing to the pre-war cynicism of the campus. He has to learn to understand how scientific and moral aspects are frequently interlocked in problems, and how the scientific aspects may still be approached. He has to see realistically the problems of power, which are interwoven with many of the questions he is to study, without his becoming a servant to vested interests. His realism should be akin to courage in the sense of Plato, who defines courage as wisdom in the face of danger.

The problem of our own values, objectives, and of objectivity are nowhere more interwoven and more important than in action-research. Fortunately the work of social scientists during the war has created in a good many people just this spirit.

Research in group dynamics is, as a rule, group research. It requires the cooperation of persons who steer group life and who record and measure various aspects of group life. One cannot overemphasize the importance of the spirit of cooperation and of social responsibility for research on group processes. To my mind it is equally important that the same spirit of cooperation dominate the relations between the various institutions which happily have become active in this field.

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